3. Verizon's Criticisms Of The Synthesis Model's Switch Model Are Without Merit.

Verizon raises several criticisms of the Synthesis Model's switch module relating to busy hour traffic, peak period usage, and switch technologies. None of these criticisms has merit.

a. The Synthesis Model Appropriately Accounts For Changes In Busy Hour Traffic Volumes.

Verizon claims that the Synthesis Model fails to take account of changes in busy hour traffic volumes. Verizon Switch Cost Br. at 27-28. This is incorrect. As AT&T/WorldCom witness Ms. Pitts testified during the hearing, modern digital switches have such large processing capacity that doubling switch usage would not lead to a change in switching investment or overload the switch. Tr. 5447, 5455-56 (Pitts). As discussed above, the low utilization levels of Verizon's switches would allow a three- or four-fold increase in usage without exhausting the processor and requiring a new switch and corresponding increase in switch investment. Tr. 5447, 5455-56 (Pitts).

b. The Synthesis Model Appropriately Handles Peak Period Usage.

Verizon again argues that the Synthesis Model cannot handle peak period traffic. Verizon Switch Cost Br. at 28-29. As demonstrated in the AT&T/WCOM Switch Cost Br. at 19-20, Verizon and AT&T/WCOM use similar methodologies in calculating peak period traffic requirements.

c. The Synthesis Model Incorporates Appropriate Technologies.

Verizon argues that the Synthesis Model fails to take into account technologies deployed since 1996. Verizon Switching Cost Br. at 29-30. This is incorrect. In fact, the Synthesis Model does take into account appropriate technologies, including for example, ISDN, which was included in the data set used by the FCC to determine switch prices. Moreover, the regression

AT&T/WorldCom included the actual 1999 RTU costs provided by Verizon, but appropriately excluded the one-time accounting charge from its restatement of Verizon's costs.

b. Verizon's Port Utilization Reflects Its Embedded Network And Not Forward Looking Costs.

Verizon incorrectly claims that AT&T/WorldCom are arguing that Verizon's port utilization charge reflects double counting. Verizon Switch Cost Br. at 24-25. In fact, that is not AT&T/WorldCom's claim. Verizon undertakes a complicated series of calculations in an effort to reflect its "actual" utilization. In so doing, Verizon is merely seeking to derive its "actual" utilization reflecting its embedded network rather than a forward-looking network. The fill factors input by Verizon in the SCIS Model and the separate "breakage" calculation made by the SCIS Model itself are sufficient to reflect forward-looking costs of port utilization, and thus the utilization inputs in Verizon's cost model should be set to 1.0. AT&T/WCOM Ex. 12P (AT&T/WorldCom Recurring Cost Panel Reb.) at 107-08.

c. Verizon Has Not Provided Appropriate Support For Its Feature Port Additive Costs.

Verizon claims that it has "fully documented" its feature costs, but its brief concedes that these costs are derived from "assumptions that are based on Verizon VA's years of experience" and not a cost study.[61] Verizon Switch Cost Br. at 25. These assumptions are nowhere supported by reliable evidence. Verizon should not be allowed to recover these costs based solely on its claimed "years of experience;" instead, these costs should be disallowed in the absence of probative evidence of their reasonableness. AT&T/WCOM Ex. 12P (AT&T/WorldCom Recurring Cost Panel Reb.) at 109-111.

[61] Nor are these inputs documented with marketing feature penetration levels, usage characteristics from the switch measurements or any other supporting evidence.

H. Interoffice Costs

Verizon asserts that the Synthesis Model's restated interoffice transport cost study was unsupported by any witness and claims that no one "can rest assured that they know exactly what changes were made to the [transport] module." Verizon Cost Br. at 173-74. This is ridiculous. If Verizon reviewed the revised transport module, it would have seen that the changes to the model were highlighted in yellow. Tr. 5601 (Pitkin) (all changes except one were highlighted in yellow). Although neither Mr. Pitkin nor Mr. Turner initially prepared the changes to the study, they reviewed the changes prior to submission of the testimony, Tr. 5573-74 (Pitkin), 5602-03 (Turner), and in discovery and during the November 29 hearing they discussed the changes and responded to all questions about the transport study. Tr. 5541-5630 (Pitkin, Turner).

At the hearing, Mr. Turner noted that many of the criticisms raised by Verizon about the Synthesis Model transport module (including those criticisms set forth in Verizon's Cost Br. at 174 n.192) applied equally to Verizon's interoffice transport study and that the Synthesis Model was superior to Verizon's study in its attempt to deal with the complexities of interoffice transport. Tr. 5547-5553 (Turner).[62] In comparison to Verizon's transport study, the Synthesis Model seeks to model transport costs based on forward-looking network design assumptions. By contrast, Verizon's transport cost model is simply by Verizon's own admission a "UNE cost-estimating model." Tr. 5584 (Gansert). In summary, the Synthesis Model provides for a comprehensive evaluation of the costs for interoffice transport by using actual forward-looking central office demand, appropriate trunk calculations based on engineering rules, and incorporates this data into an efficient SONET-based network architecture that sizes the network

[62] At the hearing Mr. Turner acknowledged that one complaint raised by Dr. Tardiff relating to remote switches was valid but had minimal impact on costs developed by the Synthesis Model. Tr. 5607-09 (Turner); AT&T/WCOM Response to Record Request No. 21 (11/29/01).

and the investment required consistent with TELRIC principles. On the other hand, Verizon departs entirely from TELRIC principles in that it arbitrarily engineers a SONET network that is inconsistent with its own efficient operation of its interoffice network and inconsistent with its own testimony in this proceeding regarding the number of nodes that should be used on a SONET ring. The result is that Verizon's interoffice transport cost study arbitrarily establishes higher costs than even exist in Verizon's current operation of its SONET networks.

With respect to Verizon's study, the principal difference between the parties relates to the determination of the appropriate number of nodes per ring.[63] Verizon's transport study is clearly based on its embedded transport network, and its forward-looking assumptions relate largely to the type of electronics and equipment used. Verizon Cost Br. at 116-19. Based solely on its "engineering judgment," Verizon claims that the six nodes per SONET ring configuration is the best representation of cost in efficiently designed network. Verizon Cost Br. at 119; Tr. 5628 ("estimate based on expert group"). This figure is significantly higher than the current number of nodes per ring in Verizon's network in Virginia (3.79). Moreover, this number of nodes per ring is consistent throughout the Verizon network -- 3.76 in New York and 3.86 in Massachusetts. Tr. 5631 (Turner); AT&T/WCOM 12P (AT&T/WorldCom Recurring Cost Panel Rebuttal) at 129 & n.118. Verizon concedes that the larger the number of nodes per ring, the more difficult it is to manage traffic on the SONET ring due to possible exhaustion of the fixed line capacity between adjacent nodes. Verizon Cost Br. at 119. Moreover, the trend in SONET ring architecture is to smaller rings that will allow higher utilization of the nodes. Tr. 5630-33 (Turner). In the absence of a logical explanation for its forward-looking assumption of

[63] Verizon's use of six nodes per ring leads to an understatement of the required number of ports in its transport cost study. The transport costs are averaged over the number of ports available on the SONET ring, and thus understating the number of ports leads to an overstatement of costs. AT&T/WCOM 12P (AT&T/WorldCom Recurring Cost Panel Rebuttal) at 129-31.

six nodes per ring, Verizon's transport cost should be based on 3.79 nodes per ring. *See* AT&T/WCOM's Cost Br. at 189-90.

I. OSS/Access To OSS

1. Recovery Of Competition-onset Costs

The parties' initial briefs demonstrate that there is no legal or economic justification for recovering the one-time development costs in Verizon's "access to OSS" study through charges on orders to UNEs. Classification of access to OSS as a UNE does not dispose of how to price it. Because the cost of access to OSS is a fixed cost of the onset to competition, and does not vary with the quantity of UNEs purchased by CLECs, the costs of such access should either by borne by each carrier absorbing the costs, or recovered from end-users through a competitively neutral end-user surcharge. *Cf.* AT&T/WCOM Cost Br. at 195-97; Verizon Cost Br. at 123-27.

Verizon responds that access to OSS differs from number portability, whose costs are also recovered through an end-user surcharge, because Congress specifically required an end-user surcharge for the latter but not the former. *Id.* at 126-27. This distinction rings hollow: Verizon itself proposed recovering OSS costs through an end-user surcharge in Hawaii and has consented to a similar arrangement in New York. Moreover, even if the FCC lacks jurisdiction to impose an end-user surcharge directly, the FCC could reject OSS charges altogether on the premise that Verizon, if it so chose, could ask the Virginia SCC to impose such a surcharge. AT&T/WCOM Cost Br. at 197. Verizon's brief makes no mention of any of these points.

2. Recovery Of Ongoing OSS Expenses

AT&T and WorldCom also showed in their initial brief that Verizon's estimate of ongoing OSS expenses is inflated in several ways. AT&T/WCOM Cost Br. at 198. Verizon, while asserting that it provided adequate documentation of these costs, offers a specific defense

only for the costs of computer equipment. The assumption of 1999 computer prices, Verizon contends, is appropriate because this is the cost of the "actual installed equipment." Verizon Cost Br. at 129-30. Verizon does not dispute that computer prices have declined significantly since 1999. A forward-looking cost analysis must reflect those cost savings, not ignore them by clinging to embedded investment values.

J. Daily Usage File ("DUF")

As AT&T and WorldCom explained in their initial brief, the charges proposed by Verizon for recording and transmitting Daily Usage File ("DUF") messages are obviously inflated. In particular, the proposed per-message "Message Recording" charge of $0.0015 per message is *six times* the current price in Virginia of $.000246 per message (which is itself inflated), and also well out of proportion with the prices adopted in other states. To achieve this inflated value, Verizon has included the same types of costs it claims to be recovering through its proposed annual cost factors, has spread those costs of over an implausibly low number of messages, and has compounded the error by assuming an implausibly low rate of growth in demand. AT&T-WCOM Ex. 12P (AT&T/WorldCom Recurring Cost Panel Reb.) at 167-71.

In response to these criticisms, Verizon asserts that the "actual demand for DUF . . . has been much less than what Verizon estimated in 1996." Verizon Cost Br. at 131-32. This claim, even if true, is unresponsive to the specific costing errors identified by AT&T and WorldCom. In any event, TELRIC principles do not entitle Verizon to recover the excess costs of a network that is overbuilt or oversized for present and foreseeable demand.

II. NON-RECURRING COSTS

Verizon's initial brief demonstrates the false assumptions and misapprehensions in Verizon's non-recurring cost methodology that require the Commission to reject Verizon's

estimate the time it presently takes Verizon employees to perform the tasks required to provide UNEs . . ."[64] This, of course, is the primary problem with Verizon's methodology, *i.e.*, that its embedded processes are not relevant to the TELRIC analysis.[65] Moreover, as Verizon witnesses made abundantly clear on cross-examination, Verizon has no documentation of the segment of its process that would be relevant, *i.e.*, the forward-looking adjustments made by its unnamed experts.[66] These facts, combined with the inherent bias built into Verizon's survey process[67] and the flaws in its statistical methodology[68], compel the conclusion that Verizon's survey results and the non-recurring costs based on them must be completely rejected.

With regard to service order processing, Verizon had originally staked its claim on the alleged objectivity of a report produced by Andersen Consulting. However, again, on cross-examination it was established that Verizon could produce no evidentiary basis or documentation to support those results.[69] In fact, Verizon subsequently submitted a last minute filing indicating that Andersen did not conduct the original TISOC study and subsequently developed lower task times than Verizon presents in this case.[70] Thus, the assertion by Verizon that "Andersen Consulting concluded that the resulting times were reasonable"[71] is inaccurate. In any event, Verizon's service order costs must be rejected as being entirely out of step with modern efficient automated OSS processes.

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[64] Verizon Cost Br. at 178.

[65] *Bell Atlantic - Delaware v. McMahon,* 80 F. Supp. 2d 218, 250-51 (D. De. Jan. 6, 2000).

[66] Tr. 4719, 4728, 4734-8, 4744-6 (Verizon NRC Panel).

[67] AT&T/WorldCom Cost Br. at 223-26.

[68] *Id.* at 224-26.

[69] Tr. 4689 (Curbelo).

[70] *See* Verizon Motion for Leave to File Corrected Non-Recurring Cost Study and Errata to Testimony.

[71] Verizon Cost Br. at 175.

Boiled down, Verizon's argument is that the actual cost that it incurs today, with few exceptions, is the same as TELRIC. In other words, Verizon maintains that its actual costs are the lowest costs resulting from the most efficient technology and processes available. Verizon makes no allowance whatsoever for two glaring discrepancies: (1) that it has and will continue to have inefficient and unnecessary costs, which should not be included in a TELRIC study; and (2) that the costs it is proposing (based on data from 1999 and before) do not even reflect the efficiency Verizon currently has attained or will be attaining as the result of known efficiency improvements such as those resulting from the OSS upgrades that Verizon contracted with Telcordia to implement.[72] Verizon has attempted to gloss over these deficiencies in its approach by glomming together all the work that Verizon work groups do and spreading the cost across all orders.[73] Verizon never produced data as to the so-called "complex" orders, which it claimed are not designed to flow through, nor did it provide any information about fallout caused by Verizon errors or inefficiencies. Thus, Verizon has completely ignored the issue of cost causation as it relates to manual labor caused by CLEC orders for UNEs. Verizon has done nothing to shake the conclusion of Mr. Walsh and AT&T/WorldCom's experts that a 2% fallout assumption is conservative if one properly defines fallout as limited to those instances attributable to, *i.e.*, caused by, CLECs.[74]

Verizon mixes apples and oranges by citing the Commission's findings that certain Verizon processes in other states are adequate for purposes of proceedings under 47 U.S.C. § 271. Those findings do not, by any means, lead to the conclusion that under the

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[72] Verizon Ex. 124 (Panel Surrebuttal) at Attachment E.

[73] AT&T/WorldCom Ex. 13P (NRC Panel Reply) at 52-56.

[74] Tr. 4659-61, 4907-08 (Walsh). Verizon relies heavily on the red herring that AT&T/WorldCom's experts have not provisioned UNEs. As Mr. Walsh explained, the group has many years of experience working for ILECs with the same elements and processes prior to the 1996 Act when the moniker "UNEs" became common. Tr. 4650-52 (Walsh).

TELRIC standard, CLECs should absorb the cost of all inefficiencies embedded in the existing processes of Verizon or reflected in its cost study. Moreover, there is no evidence that the efficiencies observed by the FCC at the end of the § 271 process in Pennsylvania are reflected in the costs presented by Verizon here, based upon survey data predating those proceedings.

B. Verizon's Position That NRCs Must Be Based On Actual Network Assumptions As Opposed To The Most Efficient Technologies Available Must Be Rejected.

Verizon relies on the ill-conceived argument that TELRIC costs should be measured exclusively by what Verizon, or its sister ILECs, are currently doing (or planning). Verizon disregards the obvious incentive for ILECs not to deliver UNEs by the least costly methods available.[75] Verizon would rely upon the fact that neither it, nor the other ILECs, have deployed electronic unbundling of loops over IDLC for CLECs, although they utilize such technology for themselves.[76] By Verizon's logic, customers and competitors would always have to wait at the whim of ILECs in order to benefit from the most efficient technologies.[77] Only if Verizon had decided to move ahead with such technologies for the benefit of CLECs would UNE rates reflect those efficiencies. This turns the TELRIC concept on its head. TELRIC costs must be based upon the least costly, technically feasible solutions regardless of whether Verizon or other ILECs have chosen to implement them. The evidence is in the record that loops may be

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[75] First Report & Order In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, *Interconnection between Local Exchange Carriers and Commercial Mobile Radio Service Providers*, FCC 96-325 at ¶ 10 (1996)..

[76] Verizon Cost Br. at 184.

[77] Verizon also finds it significant that there is no proof that any ILEC actually has attained 98% flow through of UNE orders. As discussed above, this argument ignores the relevant issue of what rate of fallout is economically attributable to CLECs and what amount of manual labor is caused by the ILEC. Ironically, Verizon's witnesses seemed quite comfortable with a much higher degree of flow through (89%) than their study reflects. Verizon Ex. 124 (NRC Panel Surrebuttal) at 4. On cross-examination, it was clear that the 87% had been reached by a meaningless calculation. Tr. 4747-55 (Peduto).

unbundled electronically over IDLC, and Verizon should not be able to recover charges for manual labor required by less efficient technologies simply because it has dragged its feet on the implementation of this option.

Verizon provides itself with efficient IDLC technology for individual loops and has included those costs in its recurring cost study. Having paid for it in recurring costs, CLECs should also receive the cost efficiency of this same technology for unbundled loops.

TELRIC rates provide an incentive to provision UNEs more efficiently by using the best processes available. If the Commission sets rates that reflect efficient forward-looking processes, Verizon is more likely to implement those processes, rather than pass on the cost of inefficient embedded processes.

C. Field Dispatch, Cross-Connects At The FDI And Related Activities Should Be Recovered As Recurring Costs.

Verizon's Brief points to no evidence which would alleviate the concern that shifting field dispatch costs to non-recurring charges will result in over-recovery and inequitable treatment of CLECs. Verizon has proposed no method by which CLECs bearing the initial field installation cost could share that cost proportionally with subsequent users, including Verizon. Furthermore, Verizon was unable to establish that the retail revenues that it removed as a proxy from the ACFs in its recurring cost study were the appropriate amounts.[78]

These problems with Verizon's approach demonstrate why the Commission should follow the straightforward method of recovering these costs through recurring charges. Verizon admits that the installation and maintenance expenses for the loop, including moves and rearrangements for the benefit of Verizon customers, are all included in its recurring cost study.[79] Verizon's convoluted attempt to remove a proxy of retail non-recurring charge revenues is

[78] Verizon Cost Br. at 195-96.

[79] Tr. 4760 (Minion).

essentially a concession that, in the absence of such machinations, all of the costs for installation and maintenance, including moves and rearrangements in the field for CLEC customers, are recovered in recurring cost studies. This has been AT&T/WorldCom's position from the start and is consistent with sound principles of cost causation and cost structure.

Verizon's reference to the collocation docket is unavailing. Verizon cites a Commission ruling which predates TELRIC by almost 10 years for a generic definition of non-recurring cost.[80] Verizon ignores the fact that, in that case, special access was not being simultaneously priced with all other elements of the entire network as the Commission is doing here. Under TELRIC, all costs must be correctly identified as recurring or non-recurring in order to avoid double recovery and obey principles of cost causation. Secondly, as the Commission Staff observed at the hearing, the Commission directed that reusability (ironically using the same example as Verizon -- collocation) gives rise to a requirement for a refund mechanism from future users. In fact, the second case cited by Verizon explicitly ordered such a mechanism.[81] Verizon declined to propose such a mechanism and failed to address the inequity that arises from charging the first user an NRC for a reusable asset.[82] Significantly, the most likely beneficiary of this inequity would be Verizon. Where a CLEC has paid Verizon's exorbitant NRC for field dispatch to place a cross-connect at the FDI and subsequently cancels the service, Verizon can

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[80] Verizon Cost Br. at 220 citing *In the Matter of Investigation of Interstate Access Tariff Non-Recurring Charges* 2 FCC Rcd 3498 (1987).

[81] Second Report and Order, Local Exchange Carriers' Rates, *Terms and Conditions for Expanded Interconnection through Physical Collocation for Special Access and Switched Transport*, 12 FCC Rcd 18730 (1997).

[82] In the case of collocation, the size of the initial expenditure, the relatively limited number of orders and the likelihood that the facility will not be re-used if the service is cancelled, may all have supported non-recurring cost treatment in the very early days of collocation (*e.g.*, 1987). Each of the factors supports treatment of field dispatch as an NRC in this arbitration. While a $100 per loop charge is significant enough to act as a barrier to entry, it is not large enough to justify the expense of a refund mechanism from future users.

enjoy the windfall of using that dedicated outside plant to serve customers at that location and keep the NRC revenue.[83]

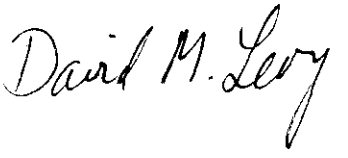
Thus, it becomes clear that Verizon's attack on AT&T/WorldCom's use of dedicated outside plant is misguided. The issue has nothing to do with Verizon's description of a network that has all cross-connects in place in 100% of all locations at any given moment in time. The point is simply that if the costs of placing the cross-connects are recovered fully in the construction and maintenance accounts of a recurring cost study, then from the perspective of the non-recurring *cost study*, there is no cost, because it has already been accounted for.

[83] As pointed out by AT&T/WorldCom witness Murray (AT&T/WorldCom Ex. 20 (Murray Surreb.) at 45), Verizon's own economic witness has acknowledged in testimony before the Hawaii Public Service Commission that reusability is relevant to the identification of costs as recurring rather than non-recurring. Hawaii Public Utilities Commission, Docket No. 7702, Reply Testimony of Dr. Robert Tanimura on behalf of Verizon Hawaii Inc. (VH RYT-2), Sept. 27, 2000, at 5.

CONCLUSION

AT&T and WorldCom respectfully request that the Commission adopt the findings and conclusions set forth above and in their joint initial briefs, and adopt the recurring and nonrecurring rates proposed by AT&T and WorldCom.

Respectfully submitted,



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January 31, 2002

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of Petition of WorldCom, Inc. Pursuant to Section 252(e)(5) of the Communications Act for Preemption of the Jurisdiction of the Virginia State Corporation Commission Regarding Interconnection Disputes with Verizon Virginia Inc., and for Expedited Arbitration	)	CC Docket No. 00-218
In the Matter of Petition of AT&T Communications of Virginia Inc., Pursuant to Section 252(e)(5) of the Communications Act for Preemption of the Jurisdiction of the Virginia Corporation Commission Regarding Interconnection Disputes With Verizon Virginia Inc.	)	CC Docket No. 00-251

POST-HEARING REPLY BRIEF OF WORLDCOM, INC.
ON SWITCH RATE DESIGN ISSUES

WORLDCOM HAS SHOWN THAT ITS SWITCHING COSTS SHOULD BE RECOVERED ON A FLAT-RATED BASIS.

A. A Flat Rated UNE Switching Charge Properly Reflects The Nature Of Switching Costs And Represents a Non-Discriminatory Rate Design.

Verizon has virtually nothing to say about WorldCom's flat-rated switching charge proposal. *See* Verizon Switch Br. at 17 n.23 (referencing West testimony). Lest there be any doubt whether "WorldCom intends to pursue its propos[al]," *id.*, in what follows we defend against Mr. West's claims that the proposal violates cost-causation principles and would otherwise be bad policy.

Mr. West agrees that the Commission should adopt a price structure for unbundled switching that reflects Verizon's cost structure. For the reasons described in detail in AT&T/WorldCom's Switch Brief, Verizon's switching costs are, for the most

part, capacity-related costs. The primary driver of Verizon's switching costs is the number of switch ports. To the extent that the remaining costs are traffic sensitive, those costs are caused by the need to serve *peak* minutes of use. While a small percentage of the overall investment in modern digital switches is engineered based on peak period usage, there are no costs that are driven by average usage.

For this reason, neither Verizon nor AT&T dispute that a rate structure that contains a minute-of-use charge for every minute of switching, on-peak and off-peak, does not accurately reflect Verizon's switching costs.[1] The Commission should make available a flat-rated switching charge because doing so is consistent with both the economic principle of cost causation and the policy of non-discriminatory UNE pricing.

Contrary to Verizon's assertions on Brief, WorldCom's rate design proposal is not designed to shift costs away from itself and to smaller carriers. Rather, it is designed to reflect the fact that the cost of switching is overwhelmingly non-traffic sensitive. Verizon's description of the operation of a switch is overly simplistic in engineering terms and mistaken regarding economic costs. Many of a switch's functions to process a call request are located in the equipment that serves the port, such as features necessary to detect the subscriber lifting the handset and testing the line. Verizon is correct that the switch performs "a multitude of tasks," but it fails to support it conclusion that these various functions incur costs that are traffic sensitive and should be allocated to the user based on minutes of use.[2] Contrary to Verizon's assertions, every feature of the switch

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[1] If CLECs passed these costs on to their customers as per minute charges, customers would make fewer calls in off-peak periods when Verizon incurs few, if any, costs. Network usage will be reduced to inefficient levels. Similarly, positive prices for usage or features when Verizon incurs no incremental cost to supply those rate elements can lead to substantial over-recovery of forward-looking economic costs. AT&T/WCOM Ex. 8 (Murray Dir.) at 20-21.

[2] AT&T/WCOM Ex. 16P (Pitts Surreb.) at 8-9.

does not potentially require replacement as usage increases. Excess capacity is built into today's switches, reflecting the decline in processor costs.

B. A Flat Rated Switching Charge Will Be Pro-Competitive and Will Reflect Underlying Costs.

There is no dispute that the best rate design to recover Verizon's port-related (non-traffic sensitive) switching costs is a flat-rated port charge because such a charge directly reflects the underlying costs and is easy to implement and audit. But it is also the case that the better rate design to recover Verizon's traffic sensitive switching costs is also a flat-rated port charge.

A price structure that recovers peak- or capacity-driven costs by spreading those costs over all minutes of use would not accurately reflect the structure of Verizon's forward-looking economic costs. As the Commission recently observed in the context of reciprocal compensation, "[t]o the extent that transport and termination costs are capacity-driven, moreover, virtually any minute-of-use rate will overestimate the cost of handling an additional call whenever a carrier is operating below peak capacity."[3] This observation applies equally well to all of Verizon's peak-driven costs for unbundled switching.[4]

The "correct" way to report the peak-period traffic-sensitive costs — that is, the reporting that would best reflect cost causation — would be to assign capacity costs across usage at different times of the day and different days of the year based on the likelihood of a peak occurring at that time. Each of Verizon's switches would have a different distribution of likely peaks, so the switching cost would have to be calculated

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[3] In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996 and In the Matter of Intercarrier Compensation for ISP-Bound Traffic, CC Dockets No. 96-98 and 99-68, FCC 01-131, released April 27, 2001, at ¶ 76.

[4] AT&T/WCOM Ex. 8 (Murray Dir.) at 18.

differently for each switch. The public data available do not enable us to unitize Verizon's peak-driven switching costs in a manner that precisely reflects the peak-period nature of the cost causation. It is clear that a competitor that must pay Verizon usage-based charges for all minutes of use incurs real off-peak usage costs, even though Verizon itself incurs little or no cost for off-peak switching. The discrimination is obvious.

In economic theory, the best rate design for traffic sensitive or peak period capacity-driven switching costs would be to assign usage at different times of the day and different days of the year based on the likelihood of a peak occurring at that time – some sort of central office-specific peak period usage charge. In practice, however, it would be virtually impossible administratively to implement such a charge. It would not be possible to perform the necessary data collection and verification tasks in a timely and cost-effective fashion. The contentious disputes that exist today about aggregate minutes of use across all switches, used as the base on which to calculate average MOU charges, would pale in comparison to the disputes about central office-specific total minutes and peak period minutes of use.

Given that the economically pure rate design for traffic sensitive costs cannot be administered, it is necessary to use a different rate design to recover Verizon's peak period capacity-driven traffic sensitive switching costs. The two obvious potential choices are a per MOU charge (dividing total traffic sensitive costs by minutes of use) and a flat-rated per port charge (dividing total traffic sensitive costs by ports). Of the two, the flat-rated port charge is the better.

There are several reasons why this is so. First, when the rate for an input (such as switching) diverges from the underlying forward-looking cost of that input, so that

CLECs' cost structures differ from the ILEC's cost structure, and the ILEC can set the price structure and levels of its retail service offerings, then the ILEC will have the ability to manipulate those retail service offerings and rates in an anticompetitive fashion. Ms. Murray provides a good example of this in her testimony, describing the potential unfair advantage that Verizon would have in offering usage-based services by inflating its competitors' off-peak switching costs relative to those of Verizon:

> Anyone familiar with cellular and PCS pricing plans can easily imagine Verizon offering a local exchange service with a flat rate just sufficient to recover loop and retail-related costs, a per-minute charge only for peak period minutes and unlimited off-peak calling without any additional charge. A competitor that must pay Verizon a positive price for every off-peak minute would have difficulty matching Verizon's price, even though the underlying cost to Verizon of supplying off-peak switching to the competitor would be equal to the cost that Verizon incurs to offer the same off-peak switching directly to the end-user.

AT&T/WCOM Ex. 8 (Murray Dir.) at 21.

There would be far less opportunity for such anticompetitive mischief if Verizon had to recover its traffic sensitive switching costs through a flat-rated port charge.[5]

Second, on the purely practical, implementation level, it is far easier for competitors to audit a flat-rated per port switching charge than a minute-of-use charge. WorldCom has more than two decades of experience auditing the usage-based bills from Verizon and other ILECs for essential inputs (such as access services) for which there are no alternative providers. Due to ILEC overcharging, WorldCom often makes up-front payments and only receives rebates for overpayment long after the fact. To the extent such auditing costs are unnecessary, they should be avoided. It will be much simpler and

[5] WCOM Ex. 6 (Goldfarb Dir.) at 5-6.

less contentious to audit per port switching charges than to audit per-minute-of-use charges.[6]

Third, one of the most contentious issues in several recent state cost cases has been determining the total minutes-of-use on ILEC switches, which is the denominator in the calculation of average minute-of-use charges. To the extent Verizon is successful in understating the number of minutes in the denominator, it is successful in inflating the average per-minute-of-use rate element and overcharging the CLECs. In the recent rate cases in New York and New Jersey, Verizon's convoluted method of determining the number of minutes to be used in the denominator of the rate calculation was a significant issue. If the Commission were to employ a per port switching charge to cover all switching costs, it would be able to avoid this very contentious battle. Since average per-minute-of-use charges do not reflect peak period capacity-driven costs, in any case, it certainly does not make sense to get caught up in a time-and-resource-consuming regulatory battle over the measurement of minutes-of-use. The administratively simplest approach is to employ a per port switching charge. This also will foster competition by reducing unnecessary costs on new entrants.

Fourth, Verizon's current residential retail rates are flat-rated.[7] This follows the pattern in most states, where regulators have favored flat-rated residential local service rates. If Verizon's switching rate were to have a per-minute-of-use component, then new entrants using UNE-platform would face a usage-based cost structure and would have to choose between setting flat-based residential retail rates that did not reflect their

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[6] *Id.*

[7] Verizon's argument for a minute-of-use charge "that shared resources should be allocated among users based on how much of the resource a user consumes" would be equally applicable to retail residential rates. However, as noted, these rates do not contain a minute-of-use charge.

underlying costs – and likely lose money serving high-usage customers – or trying to compete with Verizon while using a usage-sensitive retail rate that was both unfamiliar to many customers and higher than the Verizon rate for high-usage customers.

WorldCom is placed in an untenable competitive situation if it must offer flat-rated service to compete while at the same time incurring usage sensitive charges from Verizon. Every minute of use by a WorldCom UNE-P customer will impose a cost on WorldCom which cannot be reflected in WorldCom's retail rates due to the competitive necessity to match Verizon's flat-rated retail rates. A flat port charge for switching will maximize competitive provision of flat-based residential service.

Verizon argues that flat rated UNE switch prices means that low usage residential customers will support high usage business customers. If this were true, Verizon's low usage retail residential customers would be supporting Verizon's higher usage retail business customers. Of course, Verizon has never advanced this argument in the retail context.

Verizon argues that a flat rate structure should not be adopted because it requires assumptions about usage across all customers. Of course, this fact has not precluded Verizon from adopting a flat-rated retail rate structure.

In conclusion, use of a single flat per port switching charge to recover Verizon's port-driven non-traffic sensitive and peak period capacity-driven traffic sensitive switching costs represents the best rate design. A flat-rated switching charge would allow Verizon to recover (but not over-recover) all of its switching costs without putting pressure on competitive carriers to assess uneconomic off-peak usage charges on their retail customers. Thus, a flat-rated switching charge would promote full utilization of Verizon's network.

A per MOU rate design, on the other hand, violates the economic principle of cost causation and can lead to discrimination between Verizon and its dependent competitors. As Ms. Murray explained, such a price structure (that recovers peak period capacity-driven costs by spreading those costs over minutes of use) would not accurately reflect the structure of Verizon's costs. As explained earlier, Verizon's traffic sensitive switching costs are not driven by a per MOU basis. These costs are peak driven and capacity based. Put plainly, Verizon's cost of switching does not vary on a per MOU basis. It is wrong, therefore, to permit Verizon to force a rate design on CLECs that varies on a per MOU basis.

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Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
Petition of AT&T Communications	)	
of Virginia, Inc., Pursuant	)	
to Section 252(e)(5) of the	)	
Communications Act, for Preemption	)	**CC Docket No. 00-251**
of the Jurisdiction of the Virginia	)	
State Corporation Commission	)	
Regarding Interconnection Disputes	)	
with Verizon-Virginia, Inc.	)	
In the Matter of	)	
Petition of WorldCom, Inc. Pursuant	)	
to Section 252(e)(5) of the	)	
Communications Act for Expedited	)	
Preemption of the Jurisdiction of the	)	**CC Docket No. 00-218**
Virginia State Corporation Commission	)	
Regarding Interconnection Disputes	)	
with Verizon Virginia Inc., and for	)	
Expedited Arbitration	)	

CERTIFICATE OF SERVICE

I hereby certify that on this 31st day of January , 2002, a copy of the Joint Reply Post-Hearing Brief of WorldCom, Inc. and AT&T on Pricing Issues was served by hand delivery, and/or electronic mail to:

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